

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application.

Claim 1-38 (canceled).

39. (amended) A cartridge for a liquid, which can be connected to a dispensing device, the dispensing device including an upper portion for receiving the cartridge and a lower portion which can be pushed over the cartridge when connected to the dispensing device, the upper portion of the dispensing device being provided with a connection portion for the cartridge and with a dispensing connection portion for drawing off the liquid, the cartridge comprising:

a stiff outer casing including a top portion and a bottom portion, the top portion of the outer casing being coupled to the upper portion of the dispensing device;

a container which is stable with respect to shape and which is disposed in the casing; and

a collapsible bag disposed in the container and containing the liquid, wherein the bottom portion of the stiff outer casing is provided with an opening, and

wherein the container includes an opening and a stopper, the stopper including an insertion connection portion which forms a sealingly closing, centered guide means for the dispensing connection portion, and

wherein the stopper is ~~non-releasably~~ connected by the outer casing to the container, and

wherein the cartridge is connected to the connection portion on the upper portion of the dispensing device.

2 40. (previously presented) A cartridge according to claim 39, wherein the cartridge is releasably connected to the connection portion by means of a plug connection.

3 41. (previously presented) A cartridge according to claim 39, wherein the cartridge is releasably connected to the connection portion by means of a screw connection or a bayonet connection.

4 42. (previously presented) A cartridge according to claim 39, wherein the stopper is connected to the container by means of a snap connection.

5 43. (previously presented) A cartridge according to claim 39, wherein the stopper comprising a thermoplastic material is non-releasably connected to the container which also comprises a thermoplastic material by means of a welded joint with merging of the materials.

6 44. (previously presented) A cartridge according to claim 39, further comprising a funnel-shaped centered guide means including guide ribs disposed within the insertion connection portion of the stopper.

7 45. (previously presented) A cartridge according to claim 39, wherein the sealingly closing guide means for the dispensing connection portion comprises a press fit provided on the stopper.

8 46. (previously presented) A cartridge according to claim 39, wherein the stopper is provided at an end of the insertion connection portion with a diaphragm disposed inclinedly with respect to an axis of the insertion connection portion.

9 47. (previously presented) A cartridge according to claim 39, wherein a sealing disc provided with sealing beads is disposed between an upper edge of the container and an inside of the stopper.

10 48. (previously presented) A cartridge according to claim 39, wherein an inside of the stopper is provided with a sealing lip.

11 49. (previously presented) A cartridge according to claim 39, wherein the stiff outer casing is diffusion tight, except for the opening thereof.

12 50. (previously presented) A cartridge according to claim 39, wherein the stiff outer casing is provided with a plurality of inwardly projecting projections.

13 51. (previously presented) A cartridge according to claim 39, wherein the stiff outer casing is a unitary piece.

14 52. (previously presented) A cartridge according to claim 39, wherein the stiff outer casing comprises two pieces.

15 53. (previously presented) A cartridge according to claim 39, wherein the stiff outer casing is a deep-drawn metal casing.

17 54. (previously presented) A cartridge according to claim 53, wherein the stiff outer casing is made of aluminum.

18 55. (previously presented) A cartridge according to claim 39, wherein the stiff outer casing comprises a plastic material.

19 56. (previously presented) A cartridge according to claim 55, wherein the stiff outer casing is a thermoplastic material.

21 57. (previously presented) A cartridge according to claim 39, wherein a projecting bead is provided at the bottom of the stiff outer casing.

23 ~~58~~ (previously presented) A cartridge according to claim 39, wherein the bottom of the stiff outer casing includes a recess.

24 ~~59~~ (previously presented) A cartridge according to claim 58, wherein the stiff outer casing is provided within the recess with an opening with a diameter of between 0.1 millimeter and 5 millimeters.

25 ~~60~~ (previously presented) A cartridge according to claim 58, wherein the stiff outer casing is provided within the recess with an insert including a micro-opening which communicates with the opening in the bottom of the stiff outer casing, and wherein if the micro-opening is circular in cross-section, a diameter of the circular cross-section is between 10 μm and 500 μm and is of a length of between 100 μm and 5000 μm .

26 ~~61~~ (previously presented) A cartridge according to claim 60, wherein the insert is provided with a filter adjacent the micro-opening.

16 ~~62~~ (previously presented) A cartridge according to claim 53, wherein the stiff outer casing is provided with at least one peripherally extending crease which embraces the stopper.

20 ~~63~~ (previously presented) A cartridge according to claim 56, wherein the stiff outer casing is connected to the stopper by means of a welded joint with merging of materials.

27 ~~64~~. (previously presented) A cartridge according to claim 39, wherein an upper part of the stiff outer casing is provided with a peripherally extending groove which embraces the lower edge of the stopper.

29 ~~65~~. (previously presented) A cartridge according to claim 39, wherein an upper part of the stiff outer casing is provided with a flanged-over portion which embraces the upper edge of the stopper.

30 ~~66~~. (previously presented) A cartridge according to claim 39, wherein the cartridge is sealed in adjacent the stopper by a diffusion-tight-sealing foil.

31 ~~67~~. (previously presented) A cartridge according to claim 39, wherein an outside of the bottom of the stiff outer casing is sealed by a diffusion-tight sealing foil.

32 ~~68~~. (previously presented) A cartridge according to claim 67, wherein provided in a central region of the sealing foil on the outside of the bottom of the stiff casing is a free space which is covered by the sealing foil.

22 ~~69~~. (previously presented) A cartridge according to claim 57, wherein the cartridge can be pulled out of the dispensing device by means of a withdrawal aid which can be pushed under the projecting bead.

38 70. (previously presented) A cartridge according to claim 64, wherein the connection portion on the upper portion of the dispensing device is provided with snap hooks which engage into the peripherally extending groove in the upper part of the stiff outer casing after the cartridge has been pushed into the dispensing device.

33 72. (previously presented) A cartridge according to claim 67, wherein an inside of the bottom of the lower portion of the dispensing device is provided with a piercing device for the sealing foil which is disposed on the outside of the bottom of the stiff outer casing.

71. (canceled).

34 73. (currently amended) A cartridge according to claim 39 for an alcoholic or aqueous liquid, wherein the container and the stopper comprise polypropylene, further comprising a collapsible bag of polyethylene disposed in the container, wherein:

the stiff outer casing comprises a metal, preferably aluminum, or a plastic material, preferably polypropylene;

~~the opening in the bottom of the stiff outer casing is a bore;~~

an end of the insertion connection portion is closed by a diaphragm inclined with respect to an axis of the insertion connection portion and the sealingly closing, centered guide means is a press fit and is connected by a snap connection to the container;

the cartridge is releasably connected to the connection portion by means of a releasable plug connection, the releasable plug connection being a snap connection in which there are provided in the connection portion of the upper portion of the dispensing device snap hooks which engage into a peripherally extending groove in an upper region of the cartridge;

the opening at the bottom of the stiff outer casing is a bore or the bottom of the outer casing includes an inset with a micro-opening which communicates with the
with a bore in the outer casing; and

an inside of the bottom of the lower portion of the dispensing device is provided with a resilient piercing device for a sealing foil on an underside of the bottom of the casing.

4174. (previously presented) A cartridge according to claim 39 for an alcoholic or aqueous liquid, wherein the container and the stopper comprise polypropylene, further comprising a collapsible bag of polyethylene disposed in the container, wherein:

the stiff outer casing comprises a metal, preferably aluminum;

an end of the stopper is closed by a diaphragm which is inclined to an axis of the insertion connection portion;

the sealingly, closing guide means is in the form of a press fit;

~~the stopper is non-releasably connected by the outer casing to the~~
container;

the connection between the cartridge and the connection portion of the dispensing device is a releasable connection in the form of a snap connection in which

there are hooks provided in the connection portion of the upper portion of the dispensing device snap hooks which engage into a peripherally extending groove in an upper region of the cartridge;

an inside of the bottom of the lower portion of the dispensing device is provided with a resilient piercing device for a sealing foil on an underside of the bottom of the casing.

4275. (previously presented) A cartridge according to claim 74, wherein the liquid contains a pharmacologically active substance.

3576. (previously presented) A cartridge according to claim 73, wherein the liquid contains a pharmacologically active substance.

477. (previously presented) A cartridge according to claim 39, wherein the liquid contains a pharmacologically active substance.

4378. (previously presented) A cartridge according to claim 74 for a medical liquid wherein the medical liquid contains one or more of the active substances Berotec (Fenoterol hydrobromide); 1-(3,5-dihydroxy-phenyl)-2-[[1-(4-hydroxy-benzyl)-ethyl]-amino]-ethanol hydrobromide), Atrovent (Ipratropium bromide), Berodual (combination of Fenoterol hydrobromide and Ipratropium bromide), Salbutamol, Salbutomal sulphate Combivent, Oxivent (Oxitropium bromide), Ba 679 (Tiotropium bromide), BEA 2108 (di-(2-thienyl)-glycolic acid tropenol ester), Flunisolid, Budesonid and Beclomethasone.

~~36~~ 79. (previously presented) A cartridge according to claim 73 for a medical liquid wherein the medical liquid contains one or more of the active substances Berotec (Fenoterol hydrobromide); 1-(3,5-dihydroxy-phenyl)-2-[[1-(4-hydroxy-benzyl)-ethyl]-amino]-ethanol hydrobromide), Atrovent (Ipratropium bromide), Berodual (combination of Fenoterol hydrobromide and Ipratropium bromide), Salbutamol, Salbutomal sulphate Combivent, Oxivent (Oxitropium bromide), Ba 679 (Tiotropium bromide), BEA 2108 (di-(2-thienyl)-glycolic acid tropenol ester), Flunisolid, Budesonid and Beclomethasone.

~~48~~ 80. (previously presented) A cartridge according to claim 39 for a medical liquid wherein the medical liquid contains one or more of the active substances Berotec (Fenoterol hydrobromide); 1-(3,5-dihydroxy-phenyl)-2-[[1-(4-hydroxy-benzyl)-ethyl]-amino]-ethanol hydrobromide), Atrovent (Ipratropium bromide), Berodual (combination of Fenoterol hydrobromide and Ipratropium bromide), Salbutamol, Salbutomal sulphate Combivent, Oxivent (Oxitropium bromide), Ba 679 (Tiotropium bromide), BEA 2108 (di-(2-thienyl)-glycolic acid tropenol ester), Flunisolid, Budesonid and Beclomethasone.

~~44~~ 81. (previously presented) Use of the cartridge according to claim 74 containing a medical liquid for producing an aerosol by means of an atomizer.

~~37~~ 82. (previously presented) Use of the cartridge according to claim 73 containing a medical liquid for producing an aerosol by means of an atomiser.

44 83. (previously presented) Use of the cartridge according to claim 39 containing a medical liquid for producing an aerosol by means of an atomiser.

45 84. (previously presented) Use of the cartridge according to claim 74 containing a medical liquid for producing an inhalable aerosol for treatment of illnesses.

38 85. (previously presented) Use of the cartridge according to claim 73 containing a medical liquid for producing an inhalable aerosol for treatment of illnesses.

50 86. (previously presented) Use of the cartridge according to claim 39 containing a medical liquid for producing an inhalable aerosol for treatment of illnesses.

51 87. (previously presented) A cartridge according to claim 39, wherein the cartridge is releasably connected to the connection portion.

39 88. (new) A cartridge according to claim 73, wherein a sealing disc provided with sealing beads is disposed between an upper edge of the container and an inside of the stopper.

40 89. (new) A cartridge according to claim 73, wherein an outside of the bottom of the stiff outer casing is sealed by a diffusion-tight sealing foil.

~~52~~⁹⁰. (new) A cartiridge according to claim 39, wherein the stopper is non-releasably connected by the outer casing to the container.

~~46~~⁹¹. (new) A cartiridge according to claim 74, wherein the stopper is non-releasably connected by the outer casing to the container.